

What is Claimed Is:
 sub C¹ 8

1. A recombinant vector which is replication-competent in a neoplastic cell and which overexpresses an adenovirus death protein.

2. The recombinant vector of claim 1 wherein the adenovirus death protein comprises amino acids 1-26, 41-59, and 63-70 of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 or a conservatively substituted variant thereof or wherein the adenovirus death protein comprises SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8.

~~3. The recombinant vector of claim 2 which comprises a recombinant virus.~~

sub C² 4. The recombinant vector of claim 3, wherein the recombinant virus is an adenovirus lacking expression of at least one E3 protein selected from the group consisting of: gp19K; RID α ; RID β and 14.7K.

sub B² 5. The recombinant vector of claim 4 which comprises SEQ ID NO:3 or SEQ ID NO:4.

6. The recombinant vector of claim 3 which is replication-restricted to neoplastic cells.

7. The recombinant vector of claim 6 which comprises SEQ ID NO:1 or SEQ ID NO:2.

8. The recombinant vector of claim 3, wherein the recombinant adenovirus comprises a tissue specific promoter or an inducible promoter substituted for the E4 promoter.

9. The recombinant vector of claim 6 which comprises SEQ ID NO:14, SEQ ID NO:15 or SEQ ID NO:16.

sub C³ 10. A method for promoting death of a neoplastic cell comprising contacting the neoplastic cell with at least one vector which is replication competent in the neoplastic cell and which overexpresses an adenovirus death protein.

11. The method of claim 10 wherein the adenovirus death protein comprises amino acids 1-26, 41-59, and 63-70 of SEQ ID NO:5, ~~SEQ ID NO:6~~, SEQ ID NO:7, or SEQ ID NO:8 or a conservatively substituted variant thereof or wherein the adenovirus death protein comprises SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8.

12. The method of claim 11, wherein the vector comprises a recombinant adenovirus lacking expression of at least one E3 protein selected from the group consisting of: gp19K; RID α ; RID β and 14.7K.

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Sub 34 13. The method of claim 12, wherein the ~~neoplastic cell comprises a tumor in a patient and the contacting step comprises administering the recombinant adenovirus to the tumor.~~

14. The method of claim 13, further comprising the step of passively immunizing the patient against the recombinant adenovirus.

Sub C4 15. The method of claim 14, wherein the recombinant adenovirus comprises SEQ ID NO:3 or SEQ ID NO:4.

16. The method of claim 12, wherein the vector is replication-restricted to neoplastic cells.

17. The method of claim 16, wherein the vector is a recombinant adenovirus comprising SEQ ID NO:1 or SEQ ID NO:2.

18. The method of claim 12, wherein the recombinant adenovirus comprises a tissue specific promoter or an inducible promoter substituted for the E4 promoter.

19. The method of claim 18, wherein the recombinant adenovirus which comprises SEQ ID NO:14, SEQ ID NO:15 or SEQ ID NO:16.

20. The method of claim 13, further comprising treating the tumor with radiation.

Sub B5 21. The method of claim 20 comprising ~~administering more than one recombinant adenovirus to the tumor and treating the tumor with radiation.~~

22. The method of claim 13, further comprising treating the tumor with chemotherapy.

23. The method of claim 22 comprising administering more than one recombinant adenovirus to the tumor and treating the tumor with chemotherapy.

^{CS}
Sub B6 24. The method of claim 13, further comprising administering to the tumor ~~one or~~ more replication-defective adenovirus which ~~expresses an~~ anti-cancer gene product, wherein the recombinant adenovirus complements spread of the replication-defective adenovirus in the tumor.

25. A composition comprising:

a first recombinant virus which is replication competent in a neoplastic cell and overexpresses an adenovirus death protein; and

5 a second recombinant virus which is replication defective and which expresses an anti-cancer gene product, wherein the first recombinant virus complements replication of the second recombinant virus.

26. The composition of claim 25 wherein the first recombinant virus comprises a recombinant adenovirus lacking expression of at least one E3 protein selected from the group consisting of: gp19K; RID α ; RID β and 14.7K.

27. The composition of claim 26 wherein the recombinant adenovirus comprises a nucleotide sequence selected from the group consisting of: SEQ ID NO:1; SEQ ID NO:2; SEQ ID NO:14; SEQ ID NO:15; SEQ ID NO:16; SEQ ID NO:3; or SEQ ID NO:4.

add C' >
add D' >
add E3 > add 2 >